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## A comparative exploration of foodservice workers' illicit drug use

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## INTRODUCTION

An estimated one out of every five adults working full-time in the restaurant industry has reported using illicit drugs according to a 2015 study by the Center for Behavioral Health Statistics & Quality (CBHSQ). This statistic is in line with foodservice industry's decades-long position as the top ranking industry for employee illicit drug use (Bush & Lipari, 2015; National Institute on Drug Abuse, 2014; Nation's Restaurant News, 1997; 2007; Romeo, 2015; Substance Abuse & Mental Health Services Administration, 2009; Zhu, 2008; Zuber, 1997). However, these reports have not provided *qualitative* information to help practitioners and academics better understand the reasons why foodservice workers use illicit substances, which would be necessary to identify possible solutions for decreasing the usage rate (Frone, 2003; 2009; 2013). Interest in this problem is more than just academic; industry practitioners want to comprehend the why behind restaurant employees' illicit drug use behavior.

To investigate the research questions and contribute to the literature, this study applied Lewin's Behavior Theory (1936) and Gray's Reinforcement Sensitivity Theory (1970) as the theoretical foundation for attempting to identify reasons for the high rate of illicit substance use in a sample population in the foodservice industry. These respective theories have established that human behavior is based on personal and environmental factors, and that perceived rewards and punishments affect employees in ways that may contribute to or dissuade them from partaking in illicit drug use. Frone's (2013) application of these two theories to the workplace creates the theoretical foundation of this study.

Due to the prevalence of illicit substance use by foodservice employees (Bush & Lipari, 2015), there has been a call for researchers to identify variables that influence employee illicit substance use (Frone, 2013; Kitterlin, Moll, & Moreno, 2015). This research sought to achieve four objectives. First, this exploratory study aimed to identify environmental conditions in the

workplace that may promote substance use among foodservice employees. Second, this study sought to identify environmental conditions in the workplace that may dissuade substance use among foodservice employees. Third, this study looked to highlight which rewards and punishments utilized in the foodservice industry encourage illicit substance use. Finally, the study aimed to discern which rewards and punishments utilized in the foodservice industry dissuade illicit substance use. These variables could be used to create a scale of motivators and inhibitors of illicit drug use specifically identified by foodservice workers, and can also be used to guide continued research focused on how to decrease illicit drug use by foodservice employees.

## LITERATURE REVIEW

### *U.S. Foodservice Industry Research*

As the second-largest private-sector employer in the U.S., employing 10% of the U.S. workforce, the foodservice industry is comprised of an estimated 14.7 million employees, with 1.6 million additional new jobs forecasted by 2027 (National Restaurant Association, 2017). The foodservice industry can be a challenging workplace as management has been known to shortchange paychecks (i.e., nonpayment of overtime and/or tips), force staff to work off the clock, chronically understaff, and subject employees to verbal and physical abuse (Woods, Christodoulidou, Yavas, & Vardiabasis, 2013). Woods et al. (2013) concluded that several decades of economic restructuring, the creation of subcontracted workers, dysfunctional immigration policies, and poor employee wage and safety enforcement have resulted in the foodservice industry being riddled with employers who have created toxic working conditions for many employees. As a result, these unethical work environments are typically peppered with apprehension, anger, distrust, and suspicion, which have been linked to increased rates of employee emotional exhaustion, post-traumatic stress disorder, and illicit drug use.

Restaurants have the highest employee turnover within any segment of the service industry (Ebbin, 2016). Wildes (2008) identified that 47% of respondents intended to leave the foodservice industry within two years, with the likelihood of continuing a career in the industry hinged on employees' perception of being treated well in their current position. Recruiting, retaining, and managing this influx of employees can be daunting, particularly when annual employee turnover is at higher levels (70%) in comparison to other industries (Ebbin, 2016). Turnover proportions in the hotel and restaurant industry, and the demand for servers in particular, have created a labor crisis resulting in aggravation, expense, and lost sales (Wildes, 2008). In addition to the complications this causes for employers, all of these issues have both direct and indirect impacts on employees. High turnover results in a steady stream of new employees that need to be trained and assisted by existing employees, creating a greater workload and opportunity for error in production.

#### *Studies on Illicit Drug Use in the Foodservice Industry*

Several decades of data by the Substance Abuse and Mental Health Services Administration (SAMHSA) has identified that the foodservice industry has been found to exhibit the highest incidence of illicit drug use of all U.S. industries (Bush & Lipari, 2015; CBHSQ, 2015; SAMHSA, 2009; Romeo, 2015). Illicit drugs are defined by SAMHSA (Bush & Lipari, 2015; CBHSQ, 2015) as marijuana, crack, cocaine, inhalants, hallucinogens, heroin, and prescription drugs used non-medically. Although comparable statistics are not available for the food service industry, prescription painkiller and marijuana are reported to be the top two illicit drugs used by the U.S. population (CBHSQ, 2015). The Center for Behavioral Health Statistics

and Quality (2015) estimates that 10.2% of the U.S. population aged 12 and older have used illicit drugs.

The prevalence of illicit drug use by the workforce is not distributed evenly across all U.S. industries (Bush & Lipari, 2015; Frone, 2013). As noted, the food preparation and serving-related occupations are ranked as the highest risk occupation classification group for illicit drug use (19%) along with these additional occupation classification groups: (a) arts, design, entertainment, sports, and media (13%); (b) management (12%); (c) construction (11%); and (d) information (11%) (Bush & Lipari, 2015). The remaining 14 major standard occupational classification groups were identified as lower risk occupations for illicit drug use.

Longitudinally, in their 2003-2007 study, SAMHSA (2009) identified that 16.9% of foodservice employees used an illicit drug. By 2008-2012 the rate had increased to 19.1% indicating an increase in illicit drug usage (Bush & Lipari, 2015). A 2% increase in illicit drug use rates was also observed for the other four higher risk occupation groups listed above (Bush & Lipari, 2015).

While after-work partying is an aspect of many industry segments, it is rarely done using illicit drugs, with only 5.7% of U.S. workers reporting doing so during a 12-month period and only 2.6% reported using illicit drugs one or more times per week (Frone, 2013). Workplace illicit drug impairment (i.e., using drugs before or during the work shift) is even more rare, with studies pointing to 1.8% of the workforce reporting illicit drug impairment one or more work shifts per week (Frone, 2013). Prescription painkillers and marijuana were consumed equally before and during the workday, whereas marijuana was somewhat more prevalent after work hours (Frone, 2013).

The U.S. foodservice industry's large size, combined with a significantly higher drug use rate and the variety of undesirable workplace behaviors that are often attributed to drug use (i.e. poor performance and higher rates of absenteeism, turnover and accidents/medical claims), makes illicit drug use in this sector both an industry concern and a general public health issue (Bush & Lipari, 2015; Nation's Restaurant News, 2007; Murray, 2009; Romeo, 2015; SAMHSA, 2009; Zuber, 1997). Studies point to foodservice as a work environment with elevated risk for workplace impairment due to use of alcohol and drugs during and after work (Larsen, 1994; Leigh & Jiang, 1993; Mandell, Eaton, Anthony, & Garrison, 1992; Stinson, DeBakey, & Steffens, 1992; Zhiwei & Snizek, 2003). There is evidence to suggest that individuals who use illicit drugs may actually self-select into this industry because of the large portion of existing drug-using employees in the foodservice labor pool (Zhu, 2008) and the perception that illicit drug use is actually considered "normal" in the foodservice work environment (Kitterlin, Curtis, & Cervera, 2015; Kitterlin, Moll & Moreno, 2015).

### *Theoretical Framework*

The reasons *why* employees use illicit drugs is a key topic that has not been addressed in the numerous U.S. government studies. Among researchers who have applied findings from psychology to the study of workforce drug use, the work by Lewin (1936), Gray (1970; 1994), and Frone (2013) are most relevant here. Frone (2013) suggests that a starting point for a possible explanation to employee illicit drug use begins with Lewin (1936), who established that behavior (B) is a function (f) of a person (P) and that person's environment (E), resulting in the equation  $B = f(PE)$ . Lewin's behavior theory was expanded upon by Frone (2003; 2013), who suggests that an employee's personal traits (P) (i.e., genetics and personality) combined with the

workplace environment (E) (i.e., workplace social control, workplace stressors, and workplace illicit substance availability) may reveal employee illicit substance-use behaviors.

Previous studies have identified environmental characteristics of the foodservice industry that have been attributed to illicit drug use to include the industry's relatively young labor pool, long work shifts, late-night work schedules, and the workplace norm of post work-shift partying (Frone, 2013; Kjaerheim, Mykletun, Aasland, Haldorsen, & Anderson, 1995; Kjaerheim, Mykletun & Haldorsen, 1996; Spector, 2001). The industry's "work hard, play hard" culture has been attributed to the demand for employees to consistently produce high levels of customer service, intensity, and speed (Murray, 2009; Nation's Restaurant News, 1997; Spector, 2001; Zuber, 1997). Researchers have suggested that when new employees are socialized into a work environment with coworkers who display high levels of illicit drug consumption, the new employees' likelihood of drug use is increased (Kjaerheim et al., 1995; Kjaerheim, et al., 1996; Larsen, 1994). Thus, illicit drug use may be a learned behavior due to the workplace environment.

A theoretical perspective that further expands on the interaction between a person and the environment is reinforcement sensitivity theory (Gray, 1970; 1994; Pickering & Gray, 1999). Gray's reinforcement sensitivity theory has stood the test of time, gradually evolving and being refined over the past four decades into an acknowledged major contribution to the emotion and personality field of neuropsychology. Frone (2013) posits that Gray's reinforcement sensitivity theory provides a foundation for understanding why some employees are encouraged to use an illicit substance while others are inhibited.

Reinforcement sensitivity theory is based upon a person's reactions to the reward and punishment stimuli in a given situation (Gray, 1970; 1994; Pickering & Gray, 1999). Some

employees anticipate that illicit substance use will reduce negative emotions and/or increase positive emotions, and therefore, are more inclined to use illicit substances in an attempt to improve their job performance. However, other employees anticipate that substance use will increase negative emotions and/or decrease positive emotions that impact their job performance, and they will choose not to use illicit substances (Frone, 2013). These personality traits account for behavioral differences between individuals presented with the identical environment, with these behavioral differences showing consistency in studies over time (Pickering & Corr, 2008).

The organizational environment that employees observe and experience upon entry into the workplace provides them with the framework for desirable and undesirable work behavior (Victor & Cullen, 1987). Behaviors that are rewarded and/or viewed favorably will be learned and emulated by the employee. Those same behaviors, attitudes, and beliefs that are exhibited by the majority of employees within the organization become the workplace norms. Norms provide employees with a common perception of the work environment and the expected employee roles (Hammer, Saksvik, Nytro, Torvatn, & Bayazit, 2004; Kitterlin, Curtis, & Cervera, 2015). Workplace norms may encourage or discourage employee behavior (Hammer et al., 2004). In addition, workplace norms may promote certain behaviors that are deemed acceptable in a given environment, such as the foodservice industry, even if the behaviors are not deemed acceptable by society as a whole. For instance, employees may tolerate workplace illicit drug use if that type of behavior has been established as a norm in the workplace (Frone, 2009).

With regard to the reasons for employee illicit substance involvement, there is a call for researchers to identify which variables influence illicit substance use from employee characteristics to workplace environments (Frone, 2013). While numerous U.S. government reports quantitatively identify illicit drug use rates in the U.S. population from different



perspectives, reports are lacking that provide qualitative information to help practitioners and academics understand the reasons why foodservice workers use illicit substances (Frone, 2013). In hospitality research, the need for appropriate qualitative research has been widely recognized (Arendt, Roberts, Strohbehn, Ellis, Paez, & Meyer, 2012; Arendt, Paez, & Strohbehn, 2013, Bujisic, Hutchinson, & Bilgihan, 2014; Crawford, 2013; Kwortnik, 2003; Walsh, 2003). Therefore, this research's aim was to use the qualitative research method of grounded theory to investigate employee and workplace behaviors with the goal of gaining insights into possible cause and effect relationships.

### *Research Questions*

Because of the prevalence of illicit substance use by U.S. foodservice workers, the purpose of this exploratory study was to identify what personal and environmental factors may contribute to their higher drug usage rate. Lewin's (1936) behavior theory, further expanded upon by Frone (2003; 2013), posits that employee illicit substance-use behaviors are a function of a person's traits combined with the person's work environment; thus, the first research question is:

- 1) What are the foodservice workplace environmental conditions that encourage or inhibit employee illicit substance-use behaviors?

The second research question is based on Gray's reinforcement sensitivity theory (Gray, 1970; 1994; Pickering & Gray, 1999; Pickering & Corr, 2008) and Frone's (2013) application of Gray's theory to the workplace. This is the theoretical infrastructure for attempting to understand why some employees are more motivated to engage in illicit drug use, while others are inhibited:

- 2) What are the reward and punishment stimuli present in foodservice work environments that encourage or inhibit employee illicit substance-use behaviors?

The overarching research goal was to determine variables that could then be incorporated into a scale identifying foodservice workplace norms and environments for empirical testing on a large representative sample for quantitative analysis. Once equipped with a more detailed understanding of the variables that may influence employees, academics and industry professionals can better approach this important health issue to find solutions to lower rates of foodservice employee illicit drug use and to create an improved workplace environment for foodservice organizations.

## METHODOLOGY

During the early stages of problem solving, using a quantitative approach may be premature as close-ended survey questions may restrict study participants' ability to fully express their motivations (Creswell, 2007). Instead, a qualitative approach is used for gaining a deeper understanding of complex behaviors rather than generalizing or predicting them. Creswell (2007) stressed that qualitative research findings may often point to unseen viewpoints that are unknown to researchers yet are commonplace but may appear as unimportant to industry practitioners, who are in the workplace trenches. Rubin and Rubin (2005) emphasize that qualitative analysis is not about providing numerical summaries; instead it is to discover variations and illustrate shades of meaning of human interaction through the respondents' words. For these reasons, qualitative research was chosen to identify possible motives to help explain employee behavior and identify possible future strategies using quantitative research to modify workplace behavior.

### *Study Participants*

For this type of exploratory study, Walsh (2003) recommends delving into the research questions by conducting field-based, qualitative research, in collaboration with industry participants. The researchers for this study wanted to investigate whether illicit drug use and related issues among foodservice workers were different than non-foodservice workers, and if so, what differences existed between the two groups. Thus, two populations were targeted for data collection: (1) full-time foodservice workers and (2) full-time employees working in non-foodservice industries. Only individuals 18 years and older were permitted to participate. In an attempt to eliminate the college effect, none of the study's participants were enrolled in any college programs (SAMSA, 2013). Full-time workers are those individuals who are considered "full-time" by their employers and are hired to work at least 40 hours a week.

Because it was believed that the sensitive topic under investigation might affect recruitment of participants, multiple approaches were used to invite a wide variety of individuals to participate in this study. Recruitment efforts to attract study participants at multiple foodservice and non-foodservice organizations included flyer distribution, social media postings, word-of-mouth, and snowball recruitment methods. For example, approach was an email invitation sent to one researcher's university alumni. Another researcher conducted a short presentation at a local restaurant trade association in addition to handing out the study's flyers at the event. The researchers also distributed flyers to business industry contacts they had in the local area. Interested parties responded to emails or called the phone number provided and were given further details on the study. If they agreed to participate, a meeting was scheduled to conduct the interview.

### *Survey Instrument*

Interview questions were pilot tested with three individuals: one hourly foodservice employee, one foodservice manager, and one individual working full-time outside of the foodservice industry. Afterwards, the researchers discussed how well the participant understood each question, how comfortable the participant appeared to feel answering the questions honestly, and the likelihood of participants completing the interviews understanding that no compensation would be offered for participating in the study. Minor revisions were made to the interview script as a result of the pilot, all pertaining to wording (i.e. replacing higher reading level words with lower reading level words to eliminate confusion).

For the purpose of this study, illicit substance use was limited to the substances as defined by SAMHSA (Bush & Lipari, 2015), which includes marijuana, crack, cocaine, inhalants, hallucinogens, heroin, and prescription drugs used non-medically. Marijuana use was considered an illicit drug in this study as interviews were conducted with participants working in a state in which neither medicinal nor recreational marijuana were legalized at the time of the study. Alcohol use is not reported in the scope of this manuscript, as it is not considered an illicit substance.

Responses were collected through the use of 60-minute in-depth interviews prompted by specified open-response questions (Bogdan & Biklen, 2007). To maintain consistency, one member of the research team conducted all interviews. Establishing rapport with the study participants was not a problem probably because the lead interviewing researcher had previous experience interviewing participants about illicit drug use in the workplace. In general, during the interviews employees seemed to enjoy talking about their job, their colleagues, their customers, and the challenges they face on a daily basis, including their insight on illicit drug use in the industry. The use of open-response questions was used because the researchers were

interested in obtaining detailed answers to the complex issue of illicit drug use. Research on the topic of why employees use illicit drugs is cumbersome due to the lack of accessible data, the topic of illegal behavior, and social desirability bias, making it difficult to know what questions to ask or how to ask them (Frone, 2013).

The interview protocol, found in Appendix 1, was designed in a similar format to that of Rubin and Rubin's (2005) tree and branch approach. Questions were asked in reference to the participants' experiences with illicit substance use, such as current workplace patterns, perceptions, and attitudes among coworkers regarding illicit drug use. Follow-up probes were designed to keep the discussion going and to increase the depth and detail desired in the response. The interview guide was also used to jot down responses and suggestions for follow-up questions.

Before each interview, participants completed a consent form. Participation was voluntary and confidential. Interviews were conducted in a neutral location away from the participant's place of employment to allow for participant privacy. The interviews were audio recorded and transcribed verbatim.

### *Data Analysis*

The data analysis process moved systematically through a three-step grounded theory sequence. Step one of the process began with conducting the first round of individual interviews of five foodservice and five non-foodservice employees, with the goal of making sense of the data through content analysis (Walsh, 2003). As is common in grounded theory approaches to data (Creswell, 2007), the researchers, independent of one another, read through each of the interview transcripts from each group (foodservice employees and non-foodservice employees)

to familiarize themselves with the data and began open coding the transcripts line-by-line. The goal was to establish an initial coding list of the key research topics of (a) workplace environmental conditions that encourage and/or discourage employee illicit drug use behaviors, and (b) reward and punishments stimuli that encourages and/or discourages employee drug use. Grounded theory is an emerging data collecting process where the researchers immediately analyze the data, rather than waiting until the entire data set is collected (Creswell, 2007) to identify topics that needed additional exploration, which would then be given to the researcher conducting the interviews to further explore in the next round of interviews. The analysis process of grounded is to give meaning to the data, a process of taking the data apart, conceptualizing it, and developing concepts to determine what the parts say about the whole (Creswell, 2007).

After the second set of five interviews in each of the two employee groups, the researchers open coded these interviews. At this point, after 20 interviews, the data appeared to have reached theoretical saturation, which is defined as the point in qualitative data collection and analysis in which no new data concepts emerge and, therefore, no additional data collection is required (Creswell, 2007; Morse, 2004). The interviewer continued to interview the remaining participants to collect data on underdeveloped categories and to ensure full saturation (Creswell, 2007). The total number of participants was 29, as one participant did not fully complete the interview process, so that participant's data was not included in the analysis. This process compares with similar interview studies across disciplines that also concluded theoretical saturation with an equivalent number of participants in a qualitative study (Bardhi, Sifaneck, Johnson, & Dunlap; 2007; Drake, 2013; Leo, 2013; Notley, Holland, Maskrey, Nagar, & Kouimtsidis, 2014).

In the second phase of the grounded theory coding process, the researchers compared their independently derived codes from their three separate coding worksheets and came to an agreement on the coding categories of the data. The result was a list of codes for better understanding the research questions, which included emerging codes of motivating and inhibiting stimuli for illicit drug use by employees. Grounded theory is grounded in the specific data being studied and is not purposely forced into pre-established codes (Creswell, 2007).

For the third stage of the data analysis, the researchers together began aligning codes with common meanings into broad emergent themes (Creswell, 2007). The researchers stayed true to the constant comparison method while assigning the coded data to each theme category by comparing all previous participant comments within the same theme, a process that strengthens the theoretical properties of each theme (Creswell, 2007). Themes were not finalized until complete agreement was reached by the researchers, with any coding conflicts handled using in-depth discussion and negotiated consensus (Bradley, Curry, & Devers, 2007).

Through the use of conceptual consistency, inference consistency, and within-design consistency, interpretive rigor was achieved (Creswell, 2007). Construct validity was upheld via the use of feedback from the pilot study. Internal validity was enhanced through establishment of a defined framework, and a thorough pattern aligning with the research questions was developed from defining constructs in the literature.

Reliability was strengthened in multiple ways. First, consistency of the interview questions was established by using the protocol developed prior to the interviews. Second, coding results from the first interview were used to establish a rigorous coding protocol and inter-rater reliability between the members of the research team. Third, interview transcripts were evaluated by several researchers to bolster inter-evaluator reliability, consistency, and

agreement (Crawford, 2013; Creswell, 2007). Finally, reliability through triangulation was achieved by having each of the three members of the research team independently read, analyze, and code the data using the inductive thematic analysis process of grounded theory; these themes were then sent to participants for confirmation that their ideas had been portrayed correctly (Braun & Clarke, 2006; Creswell, 2007).

## RESULTS

### *Demographics*

There were a total of 29 respondents, of which 14 were foodservice employees (11 men and 3 women) and 15 were non-foodservice employees (6 men and 9 women). Participant ages ranged from 21 to 42, with 55% of participants (16 individuals) between the ages of 21 and 25. Of the study's participants, 17 were men (59%) and 12 were women (41%). Table 1 summarizes the participant demographics.

Table 1. Characteristics of the Study's Participants

Demographics	N	%
Gender		
Foodservice		
Male	11	79%
Female	3	21%
Non-foodservice		
Male	9	60%
Female	6	40%
Race		
Foodservice		
White	14	100%
Non-foodservice		
White	10	67%
Black	2	13%
Latino	3	20%
Manager		



Foodservice	8	57%
Non-foodservice	3	20%
Average age		
Foodservice	30	
Non-foodservice	23	

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Participants were employed in a wide range of positions both within and outside of the foodservice industry. See Table 2 for a synopsis of the participant job titles. Those who worked outside of the foodservice industry represented the fields of retail, customer service, and warehouse shipping and receiving.

Table 2. Job Titles of the Study Participants

Job Title	N
Foodservice	
Manager	6
Bartender	2
Chef	2
Delivery driver	1
Event planner	1
Server	1
Sommelier	1
Non-foodservice	
Retail	5
Manager	3
Freight operations	3
Customer service	2
Audio engineer	1
Trucking	1

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Participants were asked to indicate their current drug usage patterns. See Table 3 for results. Seven foodservice participants indicated daily illicit drug use in comparison to one non-foodservice participant. Four foodservice participants indicated occasional use versus five in non-foodservice positions. Three foodservice participants indicated no drug use in comparison to seven non-foodservice employees. All 14 (100%) foodservice participants and 80% of non-

foodservice participants indicated that they had first tried illicit drugs with friends prior to the age of 18.

Table 3. Illicit Drug Usage Patterns of Participants

Drug Usage Patterns	N	%
Tried illicit drugs before age 18		
Foodservice	14	100%
Non-foodservice	12	80%
Daily use		
Foodservice	7	50%
Non-foodservice	1	7%
Occasional use		
Foodservice	4	29%
Non-foodservice	5	47%
None		
Foodservice	3	21%
Non-foodservice	7	33%

As mentioned in the methodology section, the researchers came to an agreement on the coding categories of the data. Table 4 identifies some of the initial comments extracted from the foodservice employees interview transcripts and the corresponding codes. The codes were then organized into themes of whether it was a work behavior that encouraged or discouraged illicit drug use and/or was a personal reward or punishment stimuli.

Table 4. Foodservice Participant Comments with Corresponding Codes and Themes

Participant Comments	Codes	Workplace Encourages Use	Workplace Discourages Use	Personal Reward Stimuli	Personal Punishment Stimuli
Everyone does it and everyone has it.	Drug use a normal workplace behavior	x			
Our workplace has become, in essence, a distribution center for illicit drugs.	Ease of drug accessibility in workplace	x			
The best way to unwind after a busy night when it's 2 am and none of us are ready to go home is to party with my coworkers.	Drug use a normal workplace behavior. Improves post-work relaxation.	x		x	
Some customers really try our patience. Weed is a great way to forget about them.	Inability to fulfill customer service demands. Improves post-work relaxation.	x		x	
My drug usage increased after beginning to in the hospitality industry as a way to cope with the intensity of the job.	Required high levels of speed and/or intensity. Improves work focus.	x		x	
My erratic work schedule, demanding hours, and job stress become more manageable under the influence of drugs.	Required high levels of speed and/or intensity. Lifts energy during work shift.	x		x	
Boosts my confidence when I interact with customers who are difficult to please.	Difficult customer service demands. Decreases stress with customers.	x		x	
The stress of my manager's demands to do more work in less time makes this job stressful. I take something to decrease the stress of these demands.	Unobtainable employee goals. Decreases stress with manager.	x		x	

*Emergent Themes*

The themes that emerged from the interview responses were: (1) environmental workplace norms that encourage employee illicit drug use, (2) environmental workplace norms that discourage employee illicit substance use, (3) reward stimuli that encourage employee illicit

substance-use behaviors, and (4) punishment stimuli that discourage employee illicit substance-use behaviors.

*Theme 1: Environmental Workplace Norms that Encourage Employee Illicit Substance Use*

The majority of foodservice participants indicated that their illicit drug use had increased after beginning work within the foodservice industry. This was seen in only two non-foodservice participants. Instead, the majority of non-foodservice participants indicated that their illicit drug usage remained the same, which was identified by them as occasional to no illicit drug usage.

Table 5 identifies the respondents’ illicit drug usage after entering their respective industry.

Table 5. Participant Illicit Drug Usage After Entering Industry

Drug Usage after Entering Industry	N	%
Increased		
Foodservice	11	79%
Non-foodservice	2	13%
Decreased		
Foodservice	2	14%
Non-foodservice	3	20%
Same		
Foodservice	1	7%
Non-foodservice	10	67%

All fourteen foodservice respondents indicated that there was an acceptable cultural workplace norm of illicit drug use in their industry. Foodservice participants also indicated that the ease of accessing and using illicit drugs increased their usage with comments including the following:

*“Daily marijuana use; always use after work and sometimes before work.” (Kitchen manager, Male, 36)*

*“I use prescription pills every day; I am addicted to Loritab.” (Full-service restaurant owner and manager, Male, 42)*

*“Everyone self-medicates to some degree, whether it’s drugs or alcohol. And everyone is pretty cool with drug use.” (Owner and operator of full service restaurant, Male, 42)*

*“We all do drugs...especially pot.” (Sommelier, Male 33)*

*“Everyone does it and everyone has it.” (Bartender, Female, 28)*

Overall, non-foodservice participants expressed that drug use is not acceptable with their organization or industry. Non-foodservice workers reported rare usage patterns and, for those that did, they indicated a preference for marijuana over other drugs:

*“Marijuana use, maybe two or three times a month” (Freight operations, Male, 23).*

#### *Theme 2: Workplace Environmental Norms that Discourage Employee Illicit Substance Use*

As identified in Table 3, the majority of non-foodservice participants indicated rare or no illicit drug use. Outside of the foodservice industry, the participant responses ranged from indicating a lack of awareness of other employees’ drug use habits and an unwillingness of fellow employees to discuss drug use in the workplace to a workplace culture that reinforced that drug use was not acceptable in their organization. Comments included the following:

*“We don’t really talk about it if you do drugs. (Trucking, Male, 22)*

*“It’s not cool.” (Customer service, Female, 21)*

*“I guess it depends on the person. One person may be on drugs and they work a lot better but then some don’t. I guess it’s situational.” (Retail, Male, 22)*

In summary, participants identified workplace environmental conditions that both encourage or inhibit employee illicit substance-use behaviors. These are summarized in Table 6.

Table 6. Workplace Environmental Conditions that Impact Employee Substance-use Behaviors

Encourage Employee Illicit Substance Use	Inhibit Employee Illicit Substance Use
Detection of drug use difficult to determine	Achievable employee goals
Drug use a normal workplace behavior	Awareness of drug policies prohibiting use
Early-morning or late-night shifts	Consistently adequately staffed work shifts
Ease of drug accessibility in workplace	Discouraging after-hours partying
Encouraged after-hours partying by management	Easy to detect use and/or random tests
Frequently understaffed	Fair conflict resolution
Inability to fulfill customer service	Lack of drug accessibility at workplace
Required high levels of speed/intensity	Motivating management and policies
Stressful working relationship with management	Promotion of employee assistance program to aid with drug use and other problems
Unobtainable employee goals	Reasonable work-shift length with time and for lunch and breaks
Use encouraged by coworkers/management	Traditional daytime work shifts or consistent nontraditional work times
Work shifts consistently over 8 hours or adequate breaks	Use is an unacceptable behavior

*Theme 3: Reward stimuli that encourages employee illicit substance-use behaviors*

Foodservice participants attributed their increase in illicit drug use as a coping mechanism and self-soothing behavior, with uses such as decreasing the emotional labor experienced as a result of job stress, performance, and scheduling (long hours and/or late night work-shifts). Sample comments were as follows:

*“Some of our customers really try our patience... weed is a great way to forget about them” (Sommelier, Male 33).*

*“I have to do something to sleep after getting off work at 3 am. I can’t just go home and go to bed, I’m still wired from the shift.” (Bartender, Female, 28)*

*“You work a ten-hour shift, during which you have pressure and complaints from everyone; servers, bartenders, and guests. It comes at you from all angles during the entire shift, so when you get off work you just need a release. I can either go home after*

*work and give all that stress to my family, or I can smoke a little once I get home and chill out.” (Manager, Male, 28)*

Both foodservice and non-foodservice participants indicated euphoria, relaxation, enlightenment, and stress relief as positive outcomes attributed to their drug usage.

#### *Theme 4: Punishment stimuli that discourages employee illicit substance-use behaviors*

Participants were asked if they had experienced any negative outcomes from illicit drug use. The majority of foodservice participants’ responses focused on short-term negative effects, such as hangovers, anxiety, and lethargy.

*“I can be sloppy, a little slower, unfocused, and scatter-brained” (Chef, Male, 25).*

In comparison, the majority of non-foodservice participants reported long-term negative effects, particularly drug use’s impact on their careers.

*“You would probably lose your main source of income, your job, and may not get hired in the future” (Customer service, Female, 25).*

*“Usage decreased because I like my job” (Retail customer service, Female, 27).*

A summary of the participant comments on drug use stimuli is found in Table 7.

Table 7. Stimuli that Impacts Illicit Drug Use

Reward stimuli encouraging drug use	Punishment stimuli discouraging drug use:
Boosts confidence	Addiction or withdrawal effects
Decreases stress with management, coworkers, and/or customers	Anger, aggression, or violence
Elevates workday experience	Anxiety, paranoia, or hallucinations
Enhances social interactions	Birth defects due to drug usage
Escape reality	Conflict or loss of friends and family
Facilitates weight loss	Dangerous situations or deviant behavior
Feel enlightened	Death or overdose
Increases euphoria	Financial or legal burden
Improves post-work relaxation	Hangover or lethargy
Intensifies work focus	Injury or harm to physical appearance
Lifts energy during work shift	Moral conflicts on drug use beliefs
Relieves pain	Nausea and vomiting
	Sexual assault or domestic abuse
	Unwanted weight gain or loss

## CONCLUSIONS

### *Foodservice employee insights*

There are four issues to be emphasized. First, this study’s exploratory findings echo those of multiple studies over several decades that have identified that foodservice industry employee rates of illicit drug use are higher in comparison to non-foodservice employees (Bush & Lipari, 2015; National Institute on Drug Abuse, 2014; Nation’s Restaurant News, 2007; Kitterlin, et al., 2015; Kitterlin, et al., 2015; Larsen, 1994; Leigh & Jiang, 1993; Mandell et al., 1992; Stinson, et al., 1992; Zhiwei & Snizek, 2003; Zhu, 2008; Zuber, 1997). These prior studies did not attempt to study the reasons why foodservice workers use illicit substances (Frone, 2003; 2009; 2013). Therefore, this study’s exploratory approach attempts to identify possible reasons why by using in-depth interviews to study foodservice and non-foodservice employees.

Second, in response to the first research question, built on Lewin’s (1936) theory that behavior is a function of people and their environment, the study’s results indicate that there are environmental characteristics that encourage employee illicit substance use. These characteristics



include long work shifts that may exceed eight hours (sometimes without breaks), inconsistent payment of overtime hours, high stress due to combative management relationships and/or demanding customers, and the job's intensity during peak demand periods and/or when staffing levels are low. These findings are similar to environmental factors identified by previous studies (Kjaerheim, et al., 1995; Kjaerheim, et al., 1996; Murray, 2009; Spector, 2001, Woods et al., 2013; Zuber, 1997).

The findings also indicate that there is an environmental workplace norm in the foodservice industry that encourages employee illicit drug use. Several participants, who had indicated that their illicit drug usage increased after beginning work within the foodservice industry, cited the need to accomplish the shift's workload and intensity level. Foodservice employees felt the job become more manageable under the influence of illicit drugs due to the high energy levels necessary for employees to generate maximum food production levels or provide the consistently energetic and friendly service necessary to obtain consistently high satisfaction ratings with restaurant patrons.

Due to the restaurant industry's late night hours, a party environment is typically encouraged and reinforced by peers and managers. The constant availability and simple accessibility of illicit drugs within the industry, as indicated by foodservice participants, also fueled increased usage patterns. These findings build upon previous research studies (Frone, 2013; Kjaerheim, et al., 1995; Kjaerheim, et al., 1996; Spector, 2001) and are consistent with studies that described that illicit drug use may be a learned behavior due and a workplace norm in the foodservice workplace environment (Kjaerheim et al., 1995, Larsen, 1994), with self-selection into the industry (Kitterlin, Curtis, & Cervera, 2015) even though it is not deemed acceptable by society (Frone, 2009).

### *Non-foodservice employee insights*

In comparison, non-foodservice participants describe a work environment contrasting with that of the restaurant industry. Interviews from respondents who did not work in the restaurant industry reveal that employee illicit drug use was discouraged by both their peers and management. Employees typically worked traditional eight-hour shifts, received allotted breaks, and were paid overtime when applicable. While most non-foodservice positions had stressful peak times and demanding customers, participants generally felt their workplace was adequately staffed, had encouraging managers, resolved work conflicts, and had achievable work goals as a part of a long-term career path. Employee assistance programs were promoted as solutions to aid those employees who needed help with stressful work-related or personal situations, not just drug (or alcohol) use.

The non-foodservice employee interviews also described that illicit drug use was not a workplace norm. Use was easy to detect because erratic behavior stood out. Additionally, colleagues and managers frowned upon frequent after-hours partying and illicit drug use. These findings strengthen the notion that work-life balance norms encourage positive employee behaviors and discourage negative ones (Hammer et al., 2015). In addition, these findings from the non-foodservice employees also support Lewin (1936) and Frone (2013) that the environment does reinforce human behavior in both negative and positive environments.

### *Reward and punishment stimuli*

Third, this study strengthens the perspective in the existing literature (e.g., Gray, 1970; 1994; Pickering & Gray, 1999) that reward and punishment stimuli impact human behavior, such as employee illicit substance use (Frone 2013), which was the focus of this study's second

research question. In particular, reward stimuli that encourages employee illicit substance use was identified by both groups, particularly its ability to boost confidence, relieve stress, enhance social interactions, lift moods, and/or relieve pain. For foodservice employees, these reasons were the dominant rationale for their illicit drug use. Most restaurant employees realized that the drug's effects were temporary, typically lasting only several hours and that, when faced with similar challenges again, the desire to change their immediate problem easily with a short-term solution of illicit drug use was greater than the emotional (or sometimes physical) pain from the situation they were in. The drug helped them through the "slump" or "bind" in which they felt they were currently trapped, a finding consistent with that of Bardhi et al. (2007).

Fourth, this study's findings from in-depth employee interviews indicate that, while participants recognized that a few short-term punishment stimuli discouraged illicit drug use (i.e., hangovers or nausea), the majority of the punishment stimuli identified were the harsh realities of the long-term effects of drug use (i.e., family conflicts, physical health problems, or job loss). Of particular interest was that foodservice participants tended to focus on one or two negative short-term effects, while non-foodservice participants focused on multiple negative long-term effects, particularly how illicit drug use could negatively impact their career, relationships, and/or health. The finding that foodservice employees did not identify with the long-term consequences of illicit drug use correlated with Wildes' (2008) finding that many foodservice employees do not see themselves working in the industry for a long time. In other words, those foodservice employees who see restaurant jobs as temporary work may not see their short-term drug use as a negative consequence that could affect their long-term career aspirations.

## *Implications*

For most employers, illicit drug use by employees should not be a major concern as less than 9% of the U.S. workforce uses illicit drugs (Frone, 2013). It should, however, be of concern for employers of high-risk industries, such as the foodservice industry, where 19% of the industry's employees have been found to use illicit drugs (Bush & Lipari, 2015). This qualitative research study explored and defined the scope of the main research questions to identify what personal and environmental factors may contribute to the foodservice industry's higher illicit drug usage rate. Lewin's (1936) behavior theory suggests that behavior is a function of a person and that person's environment; this was advanced by Frone's (2013) application of behavior theory to the workplace.

For industry practitioners, several suggestions are posited. An initial step is to update employee training from simply stating the no drug policy to including a discussion on illicit drug use, its personal short-term and long-term consequences. For example, instead of considering a hangover to be the only recognizable negative consequence of illicit drug use, employees need to be aware of the series of events that could potentially follow that hangover. They may lose money in the long run due to the strong likelihood of calling in sick, showing up late, or botching orders, which may ultimately lead to job termination, impediments for future employment, and/or illness.

Because negative work conditions typically have a stronger impact than positive working conditions, which can turn a favorable or neutral job into an unfavorable one, workplace psychology scholars suggest that managers of stressful workplaces should consider focusing on three key areas: (1) improving employee task stressors, (2) allowing employees more job control, and (3) taking their leadership roles seriously (Ilgic, Keller, Elfering, Tschan, Kälin, & Semmer,

2017). For example, in the foodservice industry, job-task stressors can be improved by ensuring that managers assign job tasks that can be carried out within the given time frame of a work shift, which may mean ensuring that staffing levels are correct and/or employees have the appropriate resources to complete the assigned tasks. Food service managers should consider granting additional job control by giving employees a voice in deciding how and when they work on which assigned task. Perhaps most importantly, foodservice managers should consider taking their leadership role seriously, by being a role model of best practices instead of encouraging potentially harmful behavior, whether it is encouraging employees to party after work, to take drugs to increase their work pace, or by turning a blind eye to workplace drug use.

While the answers to solving illicit drug use are too complex to address in this research, there are things managers can change in their workplace to decrease the use of illicit drug use by foodservice employees. Some health care scholars view illicit drug use as a chronic health problem (Saitz, Palfai, Cheng, Alford, Bernstein, Lloyd-Travaglini, & Samet, 2014). As with employees who have diabetes or other chronic health conditions, setting up a workplace with healthy behaviors and manager intervention can be helpful. While hospitality organization spend thousands of dollars on pre-employment drug testing that has been found to be ineffective in eliminating illicit drug using employees (Thomas, Kitterlin, & Moll, 2014), those funds may be better spent providing training for managers and front-line employee on stress reduction methods and a fuller understanding of the negative repercussions of illicit drug use. Additionally, as hospitality organizations train all managers in safety and emergency procedures, employers could expand that training to include ways for managers to identify illicit drug use and how to create a positive work environment for employees to seek help. An open and honest dialogue by foodservice organizations about their duty-of-care towards employees and their willingness to

invest in developing effective procedures for reducing illicit drug use by foodservice management and staff.

### *Limitations and Future Studies*

Despite the contributions mentioned above, this study has several limitations. First, due to the small sample size and limited geographic reach, the findings are not generalizable to the entire population of U.S. foodservice employees, especially as the demographics of the participants were not representative of the demographics of the population as a whole (e.g. 11 males and 3 females in the foodservice sample). Another limitation is that only participants who were interested and comfortable discussing the topic of illicit drug use and its relationship to the workplace were interviewed. Further, broad generalizations cannot be made about those individuals who represented industries outside of the foodservice industry, as they were not representative of all industry categories. Because one specific industry outside of the foodservice industry was not targeted as a point of comparison for this study, no trends can be identified as a point of comparison to represent any specific industries outside of the foodservice industry.

Another limitation may be that this study relied upon self-reported data on a sensitive topic, which may have resulted in participants not being entirely forthcoming with their responses. However, self-reports are often the best source of data available to gather on employee alcohol and illicit drug involvement (Frone 2013). These individual self-reports are needed to gather detailed data on the context and pattern of employee illicit substance involvement, which aim to improve understanding on usage behaviors. With sensitive topics such as drug use, these studies expend great effort to recruit samples of individuals and to

diminish any participant apprehension regarding reporting their illicit substance use (Frone, 2013).

Despite these limitations, this study offers a preliminary understanding of illicit drug use in the foodservice industry and provides support for further investigation. The study's findings indicate that illicit drug use among foodservice employees would benefit further investigation, particularly given the finding that this behavior has been reported to increase after entry into the foodservice industry. Additional research may compare the foodservice industry to specific industries that demonstrate similar job characteristics (e.g., long hours, high stress, partying cultures, workplace impairment) in order to understand if and how those factors contribute to illicit drug use. Further investigation could also include discussions with foodservice managers, human resources managers, and restaurant owners to further determine the workplace environmental conditions that impact employee substance-use behaviors from each of these management perspectives.

Finally, future research should be conducted with a larger sample size in a quantitative nature so as to expand the findings of this initial qualitative study. This study identified 12 encouraging and 12 inhibiting workplace environmental conditions that impact employee illicit substance-use behaviors. The second research question, based on Gray's reinforcement sensitivity theory (Gray, 1970; 1994; Pickering & Corr, 2008; Pickering & Gray, 1999) and Frone's (2013) application of this theory to the workplace, identified 12 reward and 14 punishment stimuli present in the workplace that encourage or inhibit employee illicit substance-use behaviors. Practitioners can use the findings to identify workplace environmental conditions and personal reward stimuli that may be affecting their foodservice organization by encouraging employee illicit drug use.

These variables can be incorporated into a scale for academics to identify foodservice workplace environments and employee stimuli for empirical testing on a larger scale for quantitative analysis. Once equipped with a more detailed understanding of the variables that may influence employees, academics and industry professionals can better approach this important health issue in an attempt find solutions to lower illicit drug use by foodservice employees, thereby creating an improved work environment and healthier employees.

Quantitative studies can help equip academics and industry professionals to identify solutions to the important issue of illicit drug use, with the goal of lowering illicit drug use by foodservice employees. Nonetheless, employers are often reluctant to participate in research, especially when it involves the study of undesirable behaviors, such as illicit drug use. This is typically based on concerns of potential workplace disruption or negative public impressions if results are associated with a specific organization (Frone, 2013). Therefore, it is suggested for academics to design research to minimize workplace disruptions and to mask the identities of participants and their organization in scientific publications. If foodservice employers are truly interested in identifying effective workplace policies to curb employee illicit drug use, it is suggested to partner with researchers in order to conduct high-quality research (Frone, 2013).

To conclude, this study investigated employee illicit drug use. When offered an illicit drug by a colleague or manager, why do employees take it? Is the employee compelled due to workplace environment conditions, such as the requirement to increase work speed levels, or to decrease anxiety due to a stressful work relationship? Is the employee motivated by reward stimuli, such as increasing work focus or accelerating post-work relaxation process after a long workday? Is it a combination of many factors? Because drug use is often a reflection of the overall society, solutions should not be considered without the broader context of why people



choose to take illicit drugs in the first place. Greater attention should be given to this phenomenon of illicit drug use by the foodservice workforce if the goal is to decrease such activity overall.

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## APPENDIX 1

### INTERVIEW PROTOCOL

Introduction to study. Review of IRB form. Brief discussion of what illicit drug use is, including the types of drugs: cannabis (e.g. marijuana, hash), solvents, tranquilizers (e.g. Valium), barbiturates, cocaine, stimulants (e.g. speed), hallucinogens (e.g. LSD), or narcotics (e.g. heroin). Reminder that the questions do not include use of alcoholic beverages. Reassurance of confidentiality. Building of trust.

Topic 1. Understand respondent's personal viewpoints on illicit drug use and resources used (time and money):

Have you ever used drugs other than those required for medical reasons?

Probe: What age were you when you first tried an illicit drug?

Probe: Who or what encouraged you to try it?

What are/were feelings and/or experience when you use drugs?

Probe: Is it a feeling of pain, pain relief, or pleasure feelings?

Probe: Do you notice a change in your behavior before, during, or after?

Probe: Can you give me some examples?

Tell me about your current/past drug use.

Probe: What types of drug use, specific situations, set group of people?

Probe: What is the frequency of your drug use?

Probe: How likely are you to get through the day without using drugs?

Probe: On average, how much money do/did you spend monthly on drugs?

Tell me why you decided to take (name of drug used):

Probe: Was it due to a personal or work-related reasons?

Probe: Was there a connection between your drug use and work-related issues?

Probe: Such as long work hours, job stress, or anxiety

Probe: Or attempts to improve relationships with co-workers?

Probe: Was there a connection between your drug use and personal issues?

Probe: Such as relationship stress or financial challenges?

Topic 2. Understand respondent's workplace drug use policies and behaviors:

Tell me about your employer's drug use policy.

Probe: Are you aware of a drug policy present at your place of employment?

Probe: Can you recall specific details? What part of it is impactful to you and your coworkers?

Probe: Does your employer conduct pre-employment drug tests or random drug testing?

Tell me about any assistance offered by your employer regarding drug use problems.

Probe: Do you have an Employee Assistance Program? Are you familiar with the details?

Probe: Have you or a coworker reached out for help with this program?

Probe: Can you give me more details?

Probe: How was the program helpful?

Tell me about drug use at your workplace.

Probe: How easily accessible are drugs at your workplace?

Probe: Is drug use encouraged at your workplace by co-workers? By managers?

Probe: Is it specific drugs that are used? Reasons?

Probe: Is drug use after-work hours accepted by coworkers? What about during work shifts?

Probe: Do you use drugs on the days that you work (before, during or after)?

Topic 3. Understand respondent's perceptions of coworkers' perceptions of their illicit drug use:

What is the type and level of your drug use on the days that you work?

Tell me about what your work colleagues' perceptions are about your drug use:

Probe: What are some negative attributes of drug use that your colleagues at work have?

Probe: Have they noticed you missing work or decreased productivity levels?

What about any positive attributes or perceptions of your drug use?

How do you think employees perceive drug use in your industry versus other industries?

Topic 4. Understand more in-depth insight on respondent's drug use (or feelings of coworkers use):

Tell me about some concerns that you have regarding drug use:

Probe: Is your health a concern?

Probe: Such as emotional (anger, depression, anxiety)

Probe: Or physical problems (injury, nausea)?

What about your/others drug use and how it impacts others perceptions

Probe: Comments from friends?

Probe: Comments from family?

Do you think there are repercussions to using drugs?

Probe: Has it put you in a dangerous situation, created legal or financial issues?

What impact do you think that your/others drug use has on your job?

Probe: In what ways does it impact your work productivity levels?

What impact does your drug use have on your career aspirations?

Topic 5: Gain clarity on study's overarching research goals by identifying:

What are some workplace environmental conditions that you believe may promote or dissuade substance use by employees?

What are some rewards and punishments that you think encourage or dissuade illicit substance use?

Concluding remarks and confidentiality reassurances.